buffer (buf'er)

- 1. A mixture of an acid and its conjugate base (salt), such as H₂CO₃/HCO₃-; H₂PO₄-/HPO₄2-, that, when present in a solution, reduces any changes in pH that would otherwise occur in the solution when acid or alkali is added to it; thus, the pH of the blood and body fluids is maintained relatively constant (pH 7.45) although acid metabolites are continually being formed in the tissues and CO₂ is lost in the lungs. See Also: conjugate acid-base pair
- 2. To add a buffer to a solution and thus give it the property of resisting a change in pH when it receives a limited amount of acid or alkali.

